

AMENDMENTS

Current Listing of Claims

1. (Currently Amended) A process for the preparation of hydrogen and carbon monoxide rich gas by steam reforming of a hydrocarbon feedstock in the presence of a steam reforming catalyst supported as thin film on a wall of a reactor, comprising the steps of:
 - (a) passing a process gas of hydrocarbon feedstock through a first reactor (10) having an inner wall and an outer wall, wherein a thin film of steam reforming catalyst is supported on the inner wall of the reactor (10), wherein the first reactor (10) is a preheater coil, and wherein the reactor (10) is in a heat conducting relationship with a hot gas stream of flue gas;
 - (b) passing effluent from the first reactor (10) to a subsequent tubular reactor (14) comprising at least one reformer tube having an inner wall and an outer wall and being provided with a steam reforming catalyst, wherein the steam reforming catalyst is a thin film of steam reforming catalyst supported on the inner wall of the at least one reformer tube and/or steam reforming catalyst pellets and wherein the at least one reformer tube is heated by burning of fuel, thereby obtaining a partially steam reformed gas effluent and the hot gas stream of flue gas;
 - (c) passing the effluent from the second reactor (14) to an autothermal reformer (16); and
 - (d) withdrawing from the autothermal reformer (16) a hot gas stream of product gas (20) rich in hydrogen and carbon monoxide.
2. (Previously presented) The process of claim 1, wherein the steam reforming catalyst comprises nickel and/or noble metals.
3. (Previously presented) The process of claim 1, wherein the process gas of step a) is effluent from an adiabatic prereformer.
4. (Cancelled)
5. (Previously presented) The process of claim 1, wherein the tubular reactor (14) comprises a plurality of reformer tubes having a thin film of steam reforming catalyst supported on the inner wall of the reformer tubes.